

Claims:

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1. An insert in the data signal transmission media plug receiving space of a modular housing, comprising:

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a dielectric support member having a plurality of pairs of electrically conductive elongated members, each elongated member having a front end portion including a contact portion exposed in the receiving space for making electrical contact with a media plug contact and a rear end portion including an electrically conductive connector device, wherein the  
10 plurality of pairs of elongated members are disposed on the support member in positional relationships with respect to each other such that a capacitance is formed for compensating electrical noise during transmission of a signal.

15 2. An insert as recited in claim 1, wherein the plurality of pairs of elongated members have substantially multilaterally symmetrical portions and substantially multilaterally asymmetrical portions.

20 3. An insert as recited in claim 2, wherein the front end portions are substantially multilaterally symmetrical and the rear end portions are substantially multilaterally asymmetrical.

4. An insert as recited in claim 1, wherein the front end portions are substantially parallel.

25 5. An insert as recited in claim 1, wherein each pair of the plurality of pairs of elongated members include a ring member and a tip member, wherein the rear end portions of the ring members are lower relative to the receiving space than the front end portions of the ring members.

6. An insert as recited in claim 5, wherein there are four pairs of electrically conductive elongated members.

7. An insert as recited in claim 1, wherein the front end portions of the elongated members further comprise arcuate sections for extending the elongated members into the receiving space.

8. An insert as wherein the connecting devices comprise electrically conductive pins.

9. An insert in a modular jack for receiving and compensating a signal transmitted through the eight leads from a standard RJ45 wire plug, comprising:

a dielectric support member; and

eight elongated conductive elements disposed on the support member, each element having a front portion and a rear portion, each front portion having a contact portion for establishing electrical contact with one of the eight leads, each rear portion having a connecting device for further transmission of the signal, wherein the elements are in a positional relationship with respect to each other for forming a capacitance to compensate electrical noise during transmission of the signal.

10. An insert as recited in claim 9, wherein the front portions of the eight conductive elements are in a substantially parallel positional relationship along a longitudinal axis.

11. An insert as recited in claim 10, wherein the rear portions include parallel portions and transverse portions<sup>164, 70, 74</sup> with respect to the longitudinal axis.

12. An insert as recited in claim 9, wherein the front portion is substantially arcuate.

13. An insert as recited in claim 9, wherein four of the eight conductive elements are ring voltage and the other four of the eight conductive elements are tip voltage.

14. An insert as recited in claim 13, wherein the ring elements are disposed in a first row and the tip elements are disposed in a second row on the support member, wherein the first row connecting devices are below the second row connecting devices.

15. An arrangement for compensating cross-talk noise in an electrical signal, comprising:

a printed circuit board with at least one front terminal and at least one rear terminal for connecting with electrically conductive media;

a dielectric modular jack housing having a signal transmission media receiving space for signal transmission media having a plurality of conductive leads;

a plurality of pairs of elongated conductors disposed in the signal transmission media receiving space, each elongated conductor of the plurality of elongated conductors having a front end portion and a back end portion, the back end portion including a connecting device for connecting with the front terminal on the printed circuit board and the front end portion including a contact portion for engaging the plurality of conductive leads,

wherein the plurality of pairs of elongated conductors are in a positional relationship with respect to each other to form a capacitance for compensating electrical noise in a signal transmission

16. An arrangement as recited in claim 15, wherein the front end portions are substantially parallel with respect to each other along a longitudinal axis.

